

# [Digital LCD Windshield Display Unit]

## Abstract

Automotive instrument clusters provide valuable information about a vehicle, but distract the driver's attention from the road. Automotive head-up display systems seek to solve this problem, but require costly and complex modifications to a vehicle. Using a backlit transmissive LCD panel, this same information can be displayed in reverse on a dash mounted device that is viewed as a reflection in the windshield of a vehicle. Displayed inside the driver's field of vision, the display will eliminate the need to take one's eyes from the road in order to assess vehicle data normally displayed elsewhere. The display consists of a transmissive LCD panel (pixel or character based, depending upon application), 1 or more LED lights or electro luminescent backing for backlighting and a case to prevent light from escaping in any direction other than that of the windshield.